

CLAIMS

34B

1. Use of an essentially impermeable transfer belt
5 (16) for a soft tissue paper machine for conducting a
soft tissue web (1) through a shoe press nip in the press
section of the paper machine, and from the shoe press nip
to a Yankee cylinder (5) in the dryer section of the
paper machine in a closed draw, which Yankee cylinder
10 forms, together with a transfer means (17), a transfer
nip transferring the soft tissue web from the transfer
belt to the Yankee cylinder, the transfer belt comprising
a carrier and an elastically compressible polymer layer
on its side facing the paper web, the polymer layer hav-
15 ing a hardness between 50 and 97 Shore A and having a
web-contacting surface which has a pressure-sensitive
resettable degree of roughness, the web-contacting sur-
face having a degree of roughness in a non-compressed
state of $R_z = 2-80 \mu\text{m}$, measured according to ISO 4287,
20 Part I, and a lower degree of roughness of $R_z = 0-20 \mu\text{m}$
when the polymer layer is compressed by a linear load of
20-220 kN/m applied to the essentially impermeable trans-
fer belt as measured in a non-extended press nip.

2. Use as claimed in claim 1, character-
25 is ed in that the essentially impermeable trans-
fer belt (16) has an air permeability of less than
6 $\text{m}^3/\text{m}^2/\text{min}$, measured according to the method stated in
"Standard Test Method for Air Permeability of Textile
Fabrics, ASTM D 737-75, American Society of Testing and
30 Materials".

a 3. Use as claimed in claim 1 ~~or 2~~, char a c -
t e r i s e d in that the polymer layer comprises a
polymer composition such as acryl polymer resin, poly-
urethane polymer resin and polyurethane/polycarbonate
35 polymer resin composition.

a 4. Use as claimed in ~~any one of claims 1-3~~,
char a c t e r i s e d in that the polymer layer com-

prises a particulate filler which has a hardness different from that of the polymer composition, such as kaolin clay, polymer material or metal, preferably stainless steel.

- a 5 5. Use as claimed in ~~any one of claims 1-4,~~ ^{claim 1} characterised in that the polymer layer completely encloses the carrier.
- a 6. Use as claimed in ~~any one of claims 1-5,~~ ^{claim 1} characterised in that the carrier is endless.
- a 10 7. Use as claimed in ~~any one of claims 1-5,~~ ^{claim 1} characterised in that the polymer layer is embossed to produce embossed soft tissue.
- a 15 8. Use as claimed in ~~any one of claims 1-7,~~ together with a transfer means which consists of the transfer belt (16) itself, which runs round a predetermined part of the Yankee cylinder (5) to form an extended transfer nip.